Amendments to the Specification:

Please replace paragraphs 0001, 0002, 0056 and 0090 with the following amended paragraphs.

[0001] Th<u>e</u>~~is~~ <u>subject</u> application is a <u>divisional of U.S. Patent Application Serial No. 09/899,607, filed July 5, 2001 now U.S. Patent No. 6,734,012 and claims priority</u> ~~o~~<u>from</u> commonly owned U.S. Provisional Patent Application Serial No. 60/224,141, entitled "Improved Low Fluorescence Nylon/Glass Composites for Micro-Analytical Diagnostic Applications" of Ostreicher et al., filed August 10, 2000, and is related to commonly owned U.S. Provisional Patent Application Serial No. 60/216,229, entitled "IMPROVED NON-LUMINESCENT SUBSTRATE" of Rita J. Andreoli, filed July 5, 2000, and U.S. Provisional Patent Application Serial No. 60/216,390, entitled "Improved Combination of Microporous Membrane and Solid Support for Micro-Analytical Diagnostic Applications" of M. Amin et al., filed July 6, 2000, the disclosure of each is herein incorporated by reference to the extent not inconsistent with the present disclosure.

[0002] The present disclosure relates to composite microarray non-luminescent slides useful for carrying a microarray of biological polymers on the surface thereof and, more particularly, to composite microarray non-luminescent slides having a microporous membrane effectively attached by covalent bonding through a surface treatment to a substrate that prepares the substrate to sufficiently, covalently bond to the microporous membrane formed by a phase inversion process such that the combination produced thereby is useful in microarray applications and, most particularly, to composite microarray non-luminescent slides having a porous nylon membrane covalently bonded to a solid base member, such as, for example, a glass or <u>biaxially oriented polyethylene terephthalate (bo-PET), as a product available from Dupont Teijin Films U.S., Wilmington, Delaware, under the tradename MYLAR,</u> ~~Mylar~~ microscope slide, such that the combination produced thereby is useful in microarray applications and to a process for producing such composite microarray non-luminescent slides.

[0056] A "phase inversion process" is meant to encompass the known art of porous membrane production techniques which involve phase inversion in its various forms, to produce "phase inversion membranes" By "phase inversion membranes" it is meant a porous membrane that is formed by the gelation or precipitation of a polymer membrane structure from a "phase inversion casting dope." A "phase inversion casting dope" consists of a continuous phase of

dissolved polymer capable of forming a phase inversion membrane, such as, for example, but not limited to, nylon 6,6, nylon 4,6, nylon 6, polysulfone, polyethersulfone, polyvinylidenediflouride (PVDF) in a good solvent, co-existing with a discrete phase of one or more non-solvents dispersed within the continuous phase. In accordance with generally acknowledged industry practice, the formation of the polymer membrane structure generally includes the steps of casting and quenching a thin layer of the dope under controlled conditions to affect precipitation of the polymer and transition of discrete (non-solvent phase) into a continuous interconnected pore structure. In one manner of explanation, this transition from discrete phase of non-solvent (sometimes referred to as a "pore former") into a continuum of interconnected pores is generally known as "phase inversion." Such membranes are well known in the art Occasionally, such membranes and processes will be called "ternary phase inversion" membranes and processes, with specific reference to the ability to describe the composition of the casting dope in terms of the three major components; polymer, solvent, and non-solvent(s). The presence of the three major components comprise the "ternary" system. Variations of this system include: liquid phase inversion, evaporative phase inversion, thermal phase inversion (where dissolution is achieved and sustained at elevated temperature before casting and quenching), and others.

[0090] A preferred phase inversion support disclosed in the Andreoli application comprised polyamides, organic polymers formed by the formation of amide bonds between monomers of one or more types. Particularly useful polyamides in the Andreoli disclosure were nylons. Nylons comprise aliphatic carbon chains, usually alkylene groups, between amide groups. The amide groups in nylons are very polar and can hydrogen bond with each other, and are essentially planar due to the partial double-bond character of the C-N bond. Nylons are polymers of intermediate crystallinity, crystallinity being due to the ability of the NH group to form strong hydrogen bonds with the C=O group. Nylon typically consists of crystallites of different size and perfection. It is the amorphous content of nylons that adds a diffuse scattering halo. Nylon 6,6, typically synthesized by reacting adipic acid with hexamethylene diamine, is a particularly preferred nylon for the present disclosure. Nylon 6,6 will typically contain both fluorescent and phosphorescent species which can not be extracted by conventional extraction techniques. These species are believed to be associated with the presence of α-ketoimide structures formed by thermal oxidation of the molecular backbone of the polymer, and associated with, or originating from, aldol condensation products of cyclic enone dimer and dienone trimer of cyclopentanone; all of which are present in the polymer as manufactured (See, Allen *et al.*, *Analysis of the Fluorescent and Phosphorescent Species in Nylon-66*, Eur. Polym. J., 21(6), pp. 517 - 526, 1985).

Support for the amendments above was discussed with the Examiner at length during the Interview and agreement was reached with respect thereto.